II. CLAIMS

1-13. Canceled

14. (Currently Amended) A method for the identification of T-cell stimulating protein fragments comprising the following steps:

a) establishing the amino acid sequence of an antigen which is a protein or a peptide;

b) subdividing ~~the amino acid sequence of~~ said antigen into protein fragments;

c) synthesizing at least one protein fragment having a length of from 8 to 30 amino acids, or cleaving ~~the amino acid sequence of~~ said antigen into at least one protein fragment having a length of from 8 to 30 amino acids, wherein said protein fragment has an amino acid sequence which is a subsequence of the established amino acid sequence of said antigen;

d) incubating a suspension containing T cells with the protein fragment or fragments in different experimental runs;

e) identifying

(i) at least one T cell cytokine which has been induced by the protein fragment or fragments and synthesized in the T cells, wherein the T cell cytokine or cytokines remain within the cell or are bound to the cell membrane; and/or

(ii) at least one activation marker is expressed or the expression of the marker is increased

~~expression-enhanced~~ due to the T cell stimulation by the protein fragment or fragments ~~which has been induced or expression-enhanced by the protein fragment or fragments and which is expressed in the T cells~~, wherein said activation marker can be present within the cell or expressed on the cellular surface;

wherein said T cell cytokine or cytokines or activation markers are identified by flow cytometry; and

f) assigning the experimental runs in which T cells have been stimulated and such stimulation has been recognized by the identification of one or more T cell cytokines and/or one or more activation markers, to the amino acid sequence or sequences of said protein fragments which had been incubated with the T cells;

characterized in that the incubation time is sufficiently long so that the protein fragment or fragments are sufficiently taken up by the major ~~to his compatibility~~ histocompatibility antigen (MHC) molecules present on the cellular surface, said taking up being sufficient when an unambiguous identification of stimulated T cells is possible; and

the incubation time of the suspension containing T cells with the protein fragment or fragments is sufficiently short so that **selection and proliferation** accompanied by the elimination of stimulated T cells do not occur.

15. (Previously presented) The method for the identification of T-cell stimulating protein fragments according to claim 14, wherein said identification of at least one T cell cytokine or

activation marker is made on the individual cell level.

16. (Currently Amended) The method for identification of T-cell stimulating protein fragments according to Claim 14, wherein the suspension of step d) comprises cells which present the protein fragment bound to MHC class I or class II molecules.

17. (Previously presented) The method for the identification of T-cell stimulating protein fragments according to claim 14, wherein the protein fragment in the class I restricted presentation comprises from 9 to 11 amino acids, and the protein fragment in the Class II restricted presentation comprises at least 11 amino acids.

18. (Previously presented) The method for the identification of T-cell stimulating protein fragments according to claim 14, wherein said suspension containing T cells is a suspension of whole blood, peripheral white blood cells (PWBC), splenocytes, thymocytes, bone marrow, cerebrospinal fluid and/or lymph node cells.

19. (Previously presented) The method for identification of T-cell stimulating protein fragments according to claim 14, wherein said suspension containing T cells is derived from patients to be subjected to therapy, from donors or from animals.

20. (Previously presented) The method for the identification of T-cell stimulating protein fragments according to claim 14, wherein the protein or peptide antigens are derived from multicellular eukaryotes, cells and/or tissues thereof, and cell cultures and/or tissues of donors or patients.

21. (Previously presented) The method for the identification of T-cell stimulating protein fragments according

to claim 14, wherein the T cell cytokines are of the types interferon-y, tumor necrosis factor-a (TNF-a) or interleukin 2.

22. (Withdrawn) A process for the preparation of a protein fragment/peptide which is T-cell stimulating and whose amino acid sequence or initial amino acid sequence was found by the method for the identification of T-cell stimulating protein fragments according to claim 14, wherein said protein fragment/peptide is prepared by the solid phase method, liquid phase method or by protein biosynthesis in a host.

23. (Withdrawn) The process for the preparation of a protein fragment/peptide according to claim 22, wherein said protein fragment/peptide contains insertions, deletions or substitutions (modifications) wherein one, two, three or more amino acids have been exchanged, deleted or inserted, wherein said modified protein fragment/peptide has essentially the same function with respect to the stimulation of T cells as the non-modified protein fragment/peptide.

24. (Withdrawn) The process for the preparation of a protein fragment/peptide according to claim 22, wherein said protein fragment/peptide contains at least one additional naturally occurring or not naturally occurring amino acid and/or protecting group at the N-terminal and/or C-terminal end (extended modification), wherein the extendedly modified protein fragment/peptide has essentially the same function with respect to the stimulation of T cells as the non-modified protein fragment/peptide.

25. (Withdrawn) Method of using of a protein fragment/peptide prepared by the process according to claim 22 for the preparation of a medicament for immune stimulation.

26. (Withdrawn) Method of using a protein

fragment/peptide according to claim 25, wherein said immune stimulation is a vaccination or desensitization.

27. (Currently Amended) A method for identifying T-cell stimulating protein fragments, said method comprising the following steps:

a) establishing the amino acid sequence of a protein or peptide antigen;

b) providing one or more protein fragments of said protein or peptide antigen, each of said one or more protein fragments having a length of from 8 to 30 amino acids, and each of said one or more protein fragments being a unique subsequence of the amino acid sequence of the protein or peptide antigen established in step a);

c) incubating for an incubation time a suspension comprising T cells and the one or more protein fragments;

d) identifying by flow cytometry:

i) one or more T cell cytokines induced by the one or more protein fragments and synthesized in the T cells, wherein the one or more T cell cytokines remain within the T cells or are bound to the cell membrane of the T cells; and/or

ii) one or more activation markers expressed or expression-induced due to stimulation of the T-cells by the one or more protein fragments, wherein the one or more activation markers are expressed in the T cells, and the one or more activation markers are present within the T cells

or expressed on the surface of the T cells; and

e) identifying T-cell stimulating protein fragments by ascertaining which of said one or more protein fragments has caused said one or more T cell cytokines and/or said one or more activation markers to be induced;

wherein the incubation time is sufficiently long that the one or more protein fragments are sufficiently taken up by the major ~~to his compatibility~~ histocompatibility antigen (MHC) molecules present on the surface of the T cells that an unambiguous identification of stimulation of the T cells is possible; and the incubation time is sufficiently short that selection and proliferation of the T cells accompanied by specific elimination of stimulated T cells do not occur.